WHAT IS CLAIMED IS:

1. A method of compressing moving pictures for mobile devices, wherein a process of inter-coding comprises:

determining whether motion happened or not in pixel blocks of certain size, without obtaining motion vectors from the pixel blocks;

indicating results of determining whether motion happened or not with a third map information value; and

encoding motion blocks based on the third map information value.

2. The method of claim 1, wherein size of the pixel blocks are freely chosen.

3. The method of claim 1, wherein the act of encoding motion blocks classifies the motion blocks into low bit motion blocks whose most sample values are low bit sample values and high bit motion blocks whose most sample values are high bit sample values, encodes the low bit motion blocks and the high bit motion blocks separately, and indicates results of classifying the motion blocks with a fourth map information value.

4. The method of claim 1, wherein the act of determining whether motion happened or not is performed for all pixel blocks of one frame continuously and the act of encoding motion blocks is performed for all pixel blocks of one frame continuously after the determination on whether motion happened or not.

5. The method of claim 1, wherein the process of inter-coding further comprises encoding predicted frame (P-frame) based on previously existing intra frame (I-frame) as

reference frame.